

BLM BARSTOW FIELD OFFICE

EDWARDS BOWL
MOTORIZED VEHICLE USE
CLOSURE
AND
INTERIM VEHICLE ROUTE IDENTIFICATION

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ENVIRONMENTAL ASSESSMENT CA-680-01-57

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CHAPTER 1

INTRODUCTION

Motorized vehicle activities have occurred on lands administered by the Bureau of Land Management (BLM), Barstow Field Office (BFO), and throughout Southern California for decades by casual and commercial users, and area private landowners. Currently, motor vehicle use is increasing on public lands in response to the general population growth of southern California and southern Nevada. This growth is greatest adjacent to faster growing communities, in areas set aside for off-highway-vehicle recreation, and in areas close to major tourist attractions or travel corridors. As the levels of motor-vehicle use have continued to increase on public lands, natural or biological resources have come under increased pressures. These conflicts were anticipated in the California Desert Conservation Area (CDCA) Plan, which identified and put in place a designated network and a process and schedule to update route designations in 1980. The implementation and update of this network has proceeded very deliberately, through California Desert Plan amendments, and with some exceptions, the “existing” network is still in place in most MUC Moderate and Limited areas in the Barstow Field Office.

Modification of route designations for much of the CDCA are occurring through the plan amendment process¹ that are now underway. However, immediate steps may be taken to address routes through regulatory closure procedures under either 43 CFR 8341.2 or 43 CFR 8364.1.

The Edwards Bowl area has been used intensively for several decades. The Bureau of Land Management has provided minimal management of this area, instead focusing its efforts on providing for appropriate OHV recreation opportunities at the El Mirage Recreation Area. This has led to a overall decrease of use in the Edwards Bowl area. However, the type of use (cross-country travel and travel on an extensive network of routes causing considerable adverse impacts) that continues in the area is inappropriate and unacceptable given the area’s role as critical desert tortoise habitat in recovery of the desert tortoise.

PURPOSE AND NEED

It was intended that development of the El Mirage Management Area Plan, and the associated vehicle use area, would over time result in a shift of vehicles use and a decrease in vehicle use impacts at Edwards Bowl. To some extent, this has occurred. However, unacceptable OHV impacts to designated desert tortoise and mohave ground squirrel habitat are continuing to occur. This degree of impact has necessitated the proposed vehicle use closure and interim vehicle use network. The simple presence of a vehicle route

¹Northern and Eastern Mojave Plan and Northern and Eastern Colorado Plan, both slated for approval in January of 2002; and West Mojave Coordinated Management Plan, slated for approval in June of 2003.

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in desert tortoise habitat does not necessarily equate to a specific direct impact, aside from the lack of cover, burrowing substrate and forage present within the confines of that specific route. But, the type, intensity and frequency of vehicle use within the Edwards Bowl Planning Unit has facilitated habitat fragmentation and direct incidental impacts to tortoises and other natural resources. Completion of the WEMO plan will address these issues in time, however, a more immediate resolution is required. This document explores alternatives that offer immediate, but interim relief to these important natural resources.

On March 16, 2000, the Center for Biological Diversity, and others (Center) filed for injunctive relief in U.S. District Court, Northern District of California (court) against the Bureau of Land Management (BLM) alleging that the BLM was in violation of Section 7 of the Endangered Species Act (ESA) by failing to enter into formal consultation with the U.S. Fish and Wildlife Service (FWS) on the effects of adoption of the California Desert Conservation Area Plan (CDCA Plan), as amended, upon threatened and endangered species. On August 25, 2000, the BLM acknowledged through a court stipulation that activities authorized, permitted, or allowed under CDCA Plan may adversely affect threatened and endangered species, and that the BLM is required to consult with the FWS to insure that adoption and implementation of the CDCA Plan is not likely to jeopardize the continued existence of threatened and endangered species or to result in the destruction or adverse modification of critical habitat of listed species.

Although BLM has received biological opinions on selected activities, consultation on the overall CDCA Plan is necessary to address the cumulative effects of all the activities authorized by the CDCA Plan. Consultation on the overall Plan is complex and the completion date is uncertain. Absent consultation on the entire Plan, the impacts of individual activities, when added together with the impacts of other activities in the desert are not known. The BLM entered into negotiations with plaintiffs regarding interim actions to be taken to provide protection for endangered and threatened species pending completion of the consultation on the CDCA Plan. Agreement on these interim actions avoided litigation of plaintiffs' request for injunctive relief and the threat of an injunction prohibiting all activities authorized under the Plan. These interim agreements have allowed BLM to continue to authorize appropriate levels of activities throughout the planning area during the lengthy consultation process while providing appropriate protection to the desert tortoise and other listed species in the short term. By taking interim actions as allowed under 43 CFR Part 8364.1, BLM contributes to the conservation of endangered and threatened species in accordance with 7(a)(1) of the ESA. BLM also avoids making any irreversible or irretrievable commitment of resources which would foreclose any reasonable and prudent alternative measures which might be required as a result of the consultation on the CDCA plan in accordance with 7(d) of the ESA. On March 20, 2001, the stipulation respecting All Further Injunctive Relief became effective.

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This environmental assessment will analyze the effects of an administrative closure action imposed under 43 CFR 8364.1 as an interim action.

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DESCRIPTION OF THE EDWARDS BOWL PLANNING UNIT

The Edwards Bowl Planning Unit contains eight land sections, located entirely in the north west corner of San Bernardino County adjacent to Los Angeles and Kern counties, north of the El Mirage Recreation Area and the town of Adelanto and south of the Edwards Air Force Base. Approximately half of the area is held publicly. Public lands within the area includes all of the public lands within Sections 6, 7, 8, 16, and 20 in T8N/R7W, San Bernardino Principle Meridian. The land ownership is held in predominantly a checker board pattern. The Western San Bernardino County Land Owner's Association has expressed frustration with the use of OHV's and firearms within the area. The area is bounded by partially developed lands on the west and south sides. Buckthorne Canyon Road, a county road, crosses through the area, becoming Avenue C after crossing into Los Angeles County. The area is predominantly a Creosote Bush Scrub Plant Community and is located within the Fremont-Kramer Critical Habitat Unit (CHU) and in the Western Mojave Recovery Unit for the desert tortoise (*Gopherus agassizii*)². BLM has also designated the Edwards Bowl area as Category II desert tortoise habitat³ with estimated tortoise densities in 1980 ranging from 20-50 tortoise's per square mile. The area is also located within the known range for the mohave ground squirrel (*Spermophilus mohavensis*), a State listed as threatened species and a designated BLM Sensitive Species. OHV use dates back in this area for several decades with some recreationists claiming use of the area by three generations. Most of the recreationists that utilize this area seem to come from LA County. Unauthorized OHV use of the area has caused a extensive route network with many areas nearly denuded of vegetation causing severe deterioration of the natural habitat values.

CONSISTENCY WITH OTHER PLANS, POLICIES AND GUIDANCE

The increased popularity and widespread use of off-highway vehicles (OHVs) on federal lands in the 1960s and early 1970s prompted the development of a unified federal policy for such use. Executive Order 11644 ("*Use of Off-Road Vehicles on the Public Lands*") was issued on February 9, 1972 (87 F.R. 2877), to establish policies and provide for procedures to control and direct the use of OHVs on federal lands so as to (1) protect the resources of those lands, (2) promote the safety of all users of those lands, and (3) minimize conflicts among the various uses of those lands. The order directs the agency heads responsible for managing the federal lands to issue regulations governing the designation of areas where OHVs may and may not be used. Under the order, OHV use can be restricted or prohibited to minimize (1) damage to the soil, watersheds, vegetation, or other resources of the federal lands; (2) harm to wildlife or wildlife habitats; and (3) conflicts between the use of OHVs and other types of recreation. It also requires federal agencies to issue OHV use regulations, inform the public of

²US FWS Recovery Plan (1994).

³ CDCA Plan (1989/1990 Plan Amendments Number 19).

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the lands' designation for OHV use through signs and maps, enforce OHV use regulations, and monitor the effects of OHV use on the land.

Executive Order 11989 ("*Off-Road Vehicles on Public Lands*") was issued on May 24, 1977 (42 F.R. 26959), and contained three amendments to the previous order. These amendments lifted restrictions on the use of military and emergency vehicles on public lands during emergencies, and they otherwise strengthened protection of the lands by authorizing agency heads to (1) close areas or trails to OHVs causing considerable adverse effects and (2) designate lands as closed to OHVs unless the lands or trails are specifically designated as open to them.

The BLM developed regulations (43 CFR 8340) in response to the executive orders. These regulations require the agency to designate areas where OHVs may be used and to manage the use of OHVs on public lands through the resource management planning process, which allows for public participation. The regulations also require the BLM to monitor the use of OHVs, identify any adverse effects of their use, and take appropriate steps to counteract such effects. The BLM supplements its comprehensive management plan with more detailed activity plans describing on-the-ground actions needed to implement the management plans. These activity plans generally identify specific areas or roads and trails as open, open with restrictions ("limited"), or closed to OHVs; stipulate conditions for using OHVs; emphasize the use of OHVs in suitable areas; prescribe management actions; and prescribe monitoring for adverse effects.

Edwards Bowl is within an area designated by the U.S. Environmental Protection Agency as in non-attainment of certain Clean Air Act Standards. This designation resulted in the development of plans and strategies to protect the air quality. The proposed activity is in conformance with relevant State Implementation Plans and Attainment Plans for protection of air quality in the area. The SIPs and attainment plans for these pollutants either have been approved or are currently under review by the U.S. EPA. The project area is within the jurisdiction of the Mojave Desert Air Quality Management District (MDAQMD) which has overseen the development and implementation of local attainment plans.

The proposed action would comply with the BLM Manual 6840 Special Status Species Management Policy which specifically addresses threatened, endangered, and special status plant and animal species:

6840.06A(1)(b): Ensure management plans and programs provide for the conservation of designated critical habitat on lands administered by the BLM.

6840.06A(1)(d): Monitor and evaluate ongoing management activities to ensure conservation objectives for listed species are being met.

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6840.06A(1)(e): Ensure that all activities affecting the populations and habitats of listed species are designed to be consistent with recovery needs and objectives.

6840.06A(1)(g): Implement conservation recommendations included in biological opinions if they are consistent with BLM land use planning and policy and they are technologically and economically feasible.

6840.06A(2)(d): Ensure that BLM actions will not reduce the likelihood of survival and recovery of any listed species or destroy or adversely modify their designated critical habitat.

Since the proposed action would affect the desert tortoise, a State and federally listed threatened species, formal Section 7 consultation under the 1973 Endangered Species Act (ESA) would be required. Consequently, formal conference with the California Department of Fish and Game (CDFG), per the California Endangered Species Act (CESA), would also be required as, the Mohave ground squirrel and the desert tortoise, both State-listed species, would be affected. Informal Section 7 Consultation for this action was completed and formal Section 7 Consultation was initiated, but has not been completed as of to date. The Bureau is requesting concurrence on a positive effect to the desert tortoise and the Mohave ground squirrel from the implementation of the proposed action. Any further route designation in the Edwards Bowl vicinity, not discussed herein, would be addressed in the West Mojave Plan.

CONFORMANCE WITH LAND USE PLAN

The BLM's California Desert District manages public lands in the CDCA designated by Congress, which was established with the passage of the Federal Land Policy and Management Act (FLPMA) of 1976. FLPMA directed BLM to complete a comprehensive management plan for public lands within the CDCA. The CDCA Plan was completed in 1980. The purpose of the CDCA Plan is "to provide for the use of the public lands and resources of the CDCA, including economic, educational, scientific, and recreational uses, in a manner which enhances the environmental, cultural, and aesthetic values of the Desert and its future productivity."

As outlined in the CDCA Plan, a number of public laws, acts, and executive orders provide direction to the BLM in managing access, OHV use, and wildlife resources. Some of these are: National Environmental Policy Act of 1969; Endangered Species Act of 1973 (as amended); Sikes Act; Executive Order No. 11512, Protection and Enhancement of Environmental Quality; Executive Orders 11644 and 11989, Off-Road Vehicles on Public Lands; and Executive Order 11990, Protection of Wetlands. The BLM has implemented applicable parts of these laws, acts, and executive orders into policies and guidance, which are contained within the BLM manual system.

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Consistent with these laws and policies, there are a number of CDCA Plan objectives for wildlife species and habitats. These objectives, as defined in the CDCA Plan, are also a consideration in motor-vehicle access management, and include

- 1) Avoid, mitigate, or compensate for impacts of conflicting uses on wildlife populations and habitats. Promote wildlife populations through habitat enhancement projects so that balanced ecosystems are maintained and wildlife abundance provides for human enjoyment.
- 2) Develop and implement detailed plans to provide special management for: a) areas which contain rare or unique habitat, b) areas with habitat which is sensitive to conflicting uses, c) areas with habitat which is especially rich in wildlife abundance or diversity, and d) areas which are good representatives of common habitat types. Many areas falling into these categories contain listed species, which may become the focus of management as indicator species.
- 3) Manage those wildlife species on the Federal and State lists of threatened and endangered species and their habitats so that the continued existence of each is not jeopardized. Stabilize and, where possible, improve populations through management and recovery plans developed and implemented cooperatively with the U.S. Fish and Wildlife Service and the California Department of Fish and Game.
- 4) Manage those wildlife species officially designated as sensitive by the BLM for California and their habitats so that the potential for Federal or State listing is minimized.
- 5) Include consideration of crucial habitats of sensitive species in all decisions so that impacts are avoided, mitigated, or compensated.

On page 81 of the CDCA Plan, as amended (1989), under the Motor-Vehicle Access Element, the Plan states the following:

Since 1973, BLM has managed access and recreation and recreation-vehicle use under the Interim Critical Management Program....With approval of the Desert Plan, the new designations have become effective....The (1973) ICMP maps and designations will no longer apply. Until implementation of this element is complete, the following guidelines are in effect: Existing routes of travel may be used in all Class L and M areas and in those Class I areas not designated open and in unclassified lands, unless other limitations are in effect. Tables 8 and 9 list all closed

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areas. In some areas, certain routes have been closed under the ICMP guidelines; these will remain closed. As implementation proceeds, some old limitations may be revoked and others added; the public will be notified as changes are proposed.

The CDCA Plan designations were portrayed on 1:100:000 blue-line maps published in 1979 that were created from earlier USGS 15-minute maps, and which were the culmination of public meetings and analytical work that began in 1976. Modifications to these designations were anticipated and could proceed, consistent with the public notification process as identified above. The CDCA Plan has provided guidance, consistent with motor-vehicle access area designation, on specific route designations as well. The CDCA Plan Motor-Vehicle Access Element indicates on page 77 that:

“Limited” vehicle access means that motorized-vehicle access is allowed only on certain “routes of travel”, which include roads, ways, trails, and washes. At the minimum, use will be restricted to existing routes of travel. An existing route of travel is a route established before approval of the Desert Plan in 1980, with a minimum width of two feet, showing significant surface evidence of prior vehicle use, or, for washes, a history of prior use. Where necessary other limitations will be stipulated. In all areas of limited vehicle use, special attention will be given to identifying conflict areas, zones of route proliferation, and special sites or resources being damaged by vehicle use. The public will be involved in each step of this process. Appropriate actions will then be taken to reduce or eliminate the problem, depending upon the multiple-use class. Class M access will be on existing routes, unless it is determined that use on specific routes must be limited further. Due to higher levels of resource sensitivity in Class L, vehicle access will be directed toward use of approved routes of travel. Approved routes will include primary access routes intended for regular use and for linking desert attractions for the general public as well as secondary access routes intended to meet specific user needs. Routes not approved for vehicle access will be reviewed and, after opportunity for public comment, those routes deemed to conflict with management objectives or to cause unacceptable resource damage will be given priority for closure through obliteration, barricading, or signing.

Multiple-use class guidelines, specific actions regarding wildlife, and motor vehicle access guidance identified herein provide an overall CDCA Plan framework for consideration of wildlife issues and damage to lands when addressing motor-vehicle access management, including closure activities and associated rehabilitation actions. Therefore, the proposed action and alternatives are in conformance with the California Desert Conservation Area Plan (1980, as amended).

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CHAPTER 2

ALTERNATIVES CONSIDERED

Two alternatives are analyzed in this section: the Proposed Action and No Action. The alternatives are described below.

Proposed Action

The proposed action would institute a closure in accordance with Title 43, Code of Federal Regulations 8364.1, of all of the public lands within the Edwards Bowl Planning Unit to motorized vehicle use; except for the routes which are identified on the enclosed map, which will be signed open and except for BLM operation and maintenance vehicles, law enforcement vehicles and other vehicles specifically authorized by the authorized officer of the Bureau of Land Management.

Those routes where use would be allowed would be signed Open and maintained to facilitate use. Additionally, a brochure would be prepared to explain the need for the closure, illustrate which routes are available for use, present an appropriate land use ethic, and explain how the public may participate in the formal route designation process. Formal designation of routes as Open, Limited, or Closed within the planning unit will be completed, by CDCA plan amendment, through the West Mojave Coordinated Management Plan (WMCMP).

Public outreach, visitor contact, and law enforcement will be enhanced above their current levels to support the implementation of the closure. Sign maintenance, visitor contact and law enforcement patrols will be regularly scheduled. The purpose of visitor service contacts will be to achieve voluntary compliance of use of the signed routes. Additionally, an effort will be made to develop a force of volunteers that utilize this area to help with public outreach and sign and trail maintenance. The Barstow Field Office has had tremendous success achieving voluntary compliance utilizing this methodology in other areas.

No Action Alternative

If the No Action alternative is chosen the closure would not be implemented. The extensive and proliferating route network would continue to be available for use until formal route designation can be completed through the WMCMP planning process. Signing of the route system would not occur until the completion of formal route designation through the WMCMP. Visitor contact, public outreach, education, and law enforcement efforts would likely not take place until the approval of the WMCMP,

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at which time additional strategies in support of route designation decisions may be adopted.

CHAPTER 3

AFFECTED ENVIRONMENT

Air Quality

Air quality in the San Bernardino County region is not currently meeting two National Ambient Air Quality Standards (NAAQS) established by the Federal Clean Air Act (CAA). However, air quality throughout the proposed closure area in general, is considered good. The region is currently in non-attainment for PM₁₀ (particulate matter of 10 microns or less) under the CAA. All Federal Projects (i.e., those subject to NEPA) are required to conform to provisions of the CAA. A State Implementation Plan (SIP) has been prepared for the Mojave Desert Planning Area, which identifies sources of PM₁₀ emissions and identifies control measures to reduce these emissions. In addition the area is in non-attainment for ozone, however, ozone emissions are primarily transported from outside this air basin and have been addressed separately by MDAQMD.

Cultural Resources

There are no recorded historic or prehistoric sites recorded within Edwards Bowl according to files in the Barstow Field Office. Historic period mining is known within the area. Historic period sites are primarily features related to mining.

General Vegetation

Several vegetative communities occur in the unit, including the predominant Creosote Bush Scrub, at low to moderate elevations. Desert Saltbush Scrub and Alkali Scrub occur at the lowest elevations and Mojave Mixed Woody Scrub occur at moderate to high elevations. Mojave Wash Scrub occurs in area washes and is characterized by desert willow (*Chilopsis linearis*), Catclaw (*Acacia greggii*) and sweetbush (*Bebbia juncea*).

General Wildlife

A wide variety of birds, reptiles and mammals common to the Western Mojave Desert can be found within the region. Small mammals, reptiles, and birds such as antelope ground squirrel (*Annospermophilus leucurus*), kangaroo rat (*Dipodomys* sp.), pocket mice (*Perognathus* sp.), coyote (*Canis latrans*), jack rabbit (*Lepus californicus*), rattlesnake species (*Crotalus* sp.), side blotched lizard (*Uta stansburiana*), Western whiptail (*Cnemidophorus tigris*), horned lark (*Eremophila alpestris*), and loggerheaded shrike (*Lanius ludovicianus*) occur throughout the Mojave

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Desert as well as within the Edwards Bowl area. Species of special interest are described below.

Invasive, Non-native Species

Other non-native, annual grasses and herbaceous forbs (*Schismus arabicus*, *Schismus barbatus*, *Bromus madritensis* ssp. *rubens*, *Salsola* sp., *Sisymbrium altissimum*, *Brassica tournefortii*, *Hirschfeldia incana*) occur or are suspected to occur in the affected area. These annual grasses and forbs spread easily and quickly with associated soil disturbance and loss. The probability for spread of these noxious species and possible plant community type conversion from disturbance associated with OHV use is possible. These species occur frequently along highways and roads (paved and unpaved), throughout the desert and are easily spread along these roads and highways to undisturbed areas by vehicles, humans, water, animals, and wind. It has been documented in the desert that some plant community type conversions are the direct result of non-native, annual grass/herbaceous forb establishment and spread facilitated by soil loss. This type conversion resulting in an annual, non-native grass community has also been documented to facilitate the spread of fire in the desert, henceforth, negatively affecting desert tortoise habitat.

Recreation

Most visits to the Edwards Bowl Planning Unit consist of driving for pleasure or the use of an off-highway vehicle. Other common activities include nature appreciation, natural resource studies, photography, target practice, mountain bike riding and horseback riding. Furthermore, these recreational activities are not thought mutually exclusive, e.g., it is common for visitors to drive an off-highway vehicle on both easily traveled and challenging routes to get access to a favorite remote area, set up camp, spend time hiking and target practicing.

The small number of graded roads in this Planning Unit accounts for a relatively low degree of thoroughfare transportation use, though driving for pleasure use levels in the unit remain high. Driving for pleasure and recreation activities involving OHV use throughout the unit is very high. Both activities are largely due to the presence of long standing traditional use, as well as the easy access from LA County.

Scenic Resources

There are no exciting visual elements within the Edwards Bowl Planning Unit. However, moderately interesting color, land features and a variety of cacti, coupled with easy access give the area some potential as a convenient getaway spot.

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Sensitive Vegetation

No federally threatened or endangered plant species occur immediately adjacent to Edwards Bowl or within the vicinity of the area. However, two BLM designated sensitive plant species, the Barstow woolly sunflower (*Eriophyllum mohavense*) and desert cymopterus (*Cymopterus deserticola*), and associated species habitat, are known to occur within a few miles to the north and east of the Edwards Bowl vicinity. Barstow woolly sunflower occurs in loose, gravelly soils on sandy margins of alkali depressions located within Creosote Bush Scrub. Desert cymopterus is located most commonly in deep, loose, well-drained soils on alluvial fans and stabilized dunes within Creosote Bush Scrub, Desert Saltbush Scrub, and Joshua Tree Woodland Plant Communities.

The pygmy poppy (*Canbya candida*) is also located to the north, south, and east of Edwards Bowl, however no known populations have been recorded in the affected area as of to date. This annual plant species is not listed as endangered, threatened, or BLM sensitive, but it is recognized by the California Native Plant Society (CNPS) as a list 1B species: species that are *considered* rare in California and elsewhere. This particular poppy species occurs in sandy, flat areas in Creosote Bush Scrub and Joshua Tree Woodland Plant Communities.

Although there are no known population locations recorded within boundaries of Edwards Bowl, it is suspected, due to the plant communities, soils, elevation, and close proximity to other populations, that at one time, the area most likely hosted suitable habitat for these sensitive plant species.

Sensitive Wildlife (T & E, and Sensitive)

Edwards Bowl is located in the Fremont-Kramer Critical Habitat Unit (CHU), in the Western Mojave Recovery Unit for the desert tortoise (*Gopherus agassizii*), a State and federally listed as threatened species. The Planning Area is also located in BLM designated Category II tortoise habitat with estimated densities ranging in 1980 from 20-50 tortoises per square mile. Presently, a good majority of Edwards Bowl lacks the constituent elements (cover from a fairly contiguous shrub canopy with moderate interspaces, uncompacted soils suitable for burrowing, a healthy plant community with a low amount of non-native species and low to moderate diversity, and a small amount of anthropogenic induced disturbance) that comprise desert tortoise habitat due to numerous OHV roads/trails.

Edwards Bowl is also located in the known range for the Mohave ground squirrel (*Spermophilus mohavensis*), State listed as threatened and a designated BLM Sensitive Species. This species occupies burrows in sandy, flat, vegetated desert scrub habitat in the Western Mojave Desert.

The burrowing owl (*Athene cunicularia*), a designated BLM Sensitive Species protected under the Birds of Prey State Regulations is also known to occur within the boundaries of the Edwards Bowl use

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area. This avian species, while considered scarce, occupies burrows in desert scrub/desert grassland habitat within the Western Mojave Desert, usually in conjunction with other species habitat such as Mohave ground squirrel and desert tortoise.

Raptors such as Prairie falcon (*Falco mexicanus*), golden eagle (*Aquila chrysaetos*), and red-tailed hawk (*Buteo jamaicensis*) occur throughout the Western Mojave Desert and may forage in the Edwards Bowl vicinity and are designated BLM Sensitive Species protected under the Birds of Prey State Regulations. Presently, there are no known raptor species known to inhabit the Edwards Bowl vicinity.

The Desert Tortoise (Mojave Population) Recovery Plan (FWS 1994) has previously recommended implementation and update of route designation in the Edwards Bowl vicinity and the area is also proposed as a Mohave ground squirrel Conservation Area within WEMO Plan.

Soils/Erosion

No Order III Soil Survey has been conducted in the Edwards Bowl area. However, the Southwest Desert Area Report and General Soil Map, which provides general soils information derived from existing soils data and remote sensing, has been reviewed for this action. In spite of steep slopes, relatively high precipitation and loose textured soils, erosion hazard is low due to relatively dense ground cover. The following classifications, which include three soil groups and three associations have been recorded as general soil's characteristics for the Edwards Bowl area: In the central portion of Edwards Bowl area (Hesperia-Rosamond) the soils are moderately well drained and well drained, moderately to moderately rapidly permeable, very deep, sandy loam soils developed in stratified sandy loam and loam alluvium. These soils are primarily nearly level on slopes of 0 to 2 percent on alluvial fans. These soils have been classified as having a slight to moderate erosion hazard. In the extreme western portion of the Edwards Bowl area (Calvista-Hi Vista) the soils consist of well drained, moderately and moderately rapidly permeable, shallow and moderately deep, sandy loam and loamy fine sand developed from granitic rocks. It is a gently sloping to moderately steep soil on slopes of 2 to 15 percent in the uplands, foothills, and on the plains. These soils have been classified as having a moderate erosion hazard. The dominant soils for the Edwards Bowl area (Mohave Variant - Sunrise) consists of moderately well drained and well drained, moderately slowly permeable, loamy fine sands, shallow to deep to caliche. The soils are developed in stratified clay loam to fine sandy loam alluvium and caliche. These nearly level to strongly sloping soils are on terraces. Slopes are 0 to 15 percent. These soils have been classified as having a slight (moderate to wind) erosion hazard.

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CHAPTER 4

ENVIRONMENTAL CONSEQUENCES OF PROPOSED ACTION

<u>Critical Element</u>	<u>Potentially Affected</u>	
	yes	no
ACECs		X
Air Quality	X	
Cultural Resources		X
Environmental Justice		X
Farmland, Prime/Unique		X
Floodplains		X
General Vegetation	X	
General Wildlife	X	
Invasive, Non-native Species	X	
Native American Religious Concerns		X
Public Health and Safety		X
Recreation	X	
Scenic Resources	X	
Sensitive Vegetation	X	
Sensitive Wildlife	X	
Soils/Erosion	X	
T&E Vegetation	X	
T&E Wildlife	X	
Water Quality		X
Wastes, Hazardous/Solid		X
Wetlands/Riparian Zones		X
Wild & Scenic Rivers		X
Wilderness		X

Air Quality

The implementation of the proposed action would have a positive long term affect on air quality. There would be an overall reduction of fugitive dust emission, a precursor to PM-10 through the closure of routes. Based on the anticipated reductions in emissions generated form the implementation of the proposed action, the new emissions generated under the proposed action would not exceed de minimus levels for PM-10 (100 tons/year) and would not be regionally significant; therefore, no further

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reasonably available control measures are required. The activity conforms to the CAA and plans identified to maintain and improve air quality in non-attainment areas.

Cultural Resources

No direct, indirect, or residual impacts to cultural resources have been identified with the Proposed Action. All cultural resources would be avoided by project design or would be analyzed and appropriately mitigated under supplemental environmental analysis.

General Vegetation

Perennial vegetation within the Edwards Bowl vicinity would, over time, return to areas, trails, and roads, presently denuded of vegetation with the implementation of a route closure. The temporary route identification process and closure would have a slight positive effect on the plant communities and native vegetation within the Edwards Bowl area. Reproduction and seed dissemination in these areas would also occur over time with the removal of soil disturbance in the designated closed areas. Although it would take decades for the closed areas to rehabilitate, establishment of a healthy, native, diverse plant community would eventually return.

General Wildlife

By reducing the size of the available route network and possibly the number of OHV recreationists, the opportunity for impacts to sensitive wildlife could decrease. Destruction of small mammal burrows and mortality of small mammals and reptiles associated with vehicular travel could discontinue with the interim route closure. Habitat associated with a decrease in soil erosion/loss and an increase in vegetative regrowth and plant community establishment, for wildlife species, could also return with an interim route closure. Under the proposed action, this route closure would be in effect until the WEMO Plan would be completed.

Invasive, Non-native Species

Non-native, invasive weed species already occur in the Edwards Bowl area as well as throughout the Mojave Desert. It has been documented that in areas where roads, highways, and trails occur, non-native, invasive weed spread is enhanced and occurs at a faster rate due to vehicular travel, soil erosion, and native vegetation loss. Because access within the Edwards Bowl area, would be limited to a much smaller network of routes, under the proposed action, the opportunity for the spread of invasive, non-native species would be reduced, since elimination of invasive species is impossible. Spread of invasive, non-natives would continue in the Edwards Bowl area even after a route closure, but would most likely occur at a slower rate, henceforth, impeding the possibility for a plant community type conversion and an increase in the fire regime. Directly and indirectly, habitat for sensitive species

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like the desert tortoise, Mohave ground squirrel, and burrowing owl, over time, would most likely improve with a reduction in weed colonization and spread. Reduction of impacts off of the Open route network would most likely facilitate habitat improvement for native, non-invasive vegetation at several sites and limit further invasive plant spread at others. Additionally, the invasive, non-native species issues would be addressed in the public out reach program including the brochure and visitor contacts.

Recreation

Much of the use that once utilized the Edwards Bowl area has been relocated to El Mirage Recreation Area through its development. Those that do still recreate at the Edwards Bowl tend to be long standing traditional recreationists that have utilized this area, often for several generations. Others have stated that they do not recreate at El Mirage because they enjoy the informal management and smaller crowds at Edwards Bowl. Implementation of the preferred action will be viewed as a negative by both of these groups as it will be a major change in a traditional recreation experience and will formalize and reduce the OHV recreation opportunity. Because of this some of these recreationists are expected to move to El Mirage while others are likely to move to other locations which cannot be determined.

On the other hand, this reduction of use and routes will benefit non-OHV recreationists in that the scenic quality of the area will increase over time. Game bird species will likely increase as disturbance decreases and habitat values increase, and the overall opportunity for recreation dependant on quite solitude will be enhanced. The Proposed Action would simplify a visitor's ability to find his/her way in the planning unit. Effective on-the-ground signing and open route berm maintenance would be beneficial in directing travelers within the open route network to where they want to go. Future agency outreach efforts, including strategically placed kiosks with area information and maps, as well as regular ranger visitation, would be provided. Visitors would still be responsible for knowing the rules and regulations relevant to public lands, including those related to vehicle travel.

Scenic Resources

By reducing the size of the available route network and possibly the number of OHV recreationists, the opportunity for impacts to scenic resources will decrease. Additionally, implementation of the proposed action will decrease cross-country OHV use also decreasing scenic resources impacts. Natural revegetation will increase as use decreases. Formal route designation will be completed through the WMCMP plan, which will include direction for implementation including active revegetation, signing and open route maintenance.

Sensitive Vegetation

Although no known BLM Sensitive Plant Species occur within the Edwards Bowl area, it is likely that reducing the size of the available route network and possibly the number of OHV recreationists, the

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opportunity for impacts to possible sensitive vegetation habitat would most likely decrease.

Sensitive Wildlife (T&E and Sensitive)

By reducing the size of the available route network and possibly the number of OHV recreationists, the opportunity for direct impacts to threatened species will decrease, specifically the desert tortoise and the Mojave ground squirrel. Impacts to sensitive species habitat associated with vehicular travel such as burrow collapse, species mortality, soil loss, and vegetative removal, would decrease by implementing an interim route closure and route implementation process. Directly and indirectly, habitat for sensitive species like the desert tortoise, Mojave ground squirrel, and burrowing owl, over time, would most likely improve with a decrease in soil erosion/loss and an increase in vegetative regrowth and plant community establishment.

Soils/Erosion

By reducing the size of the available route network and possibly the number of OHV recreationists, the opportunity for impacts to soils will decrease. Additionally, implementation of the proposed action will decrease cross-country OHV use also decreasing soils impacts.

RESIDUAL IMPACTS

Reducing the size of the available network of routes will likely increase the amount of use, and therefore associated impacts on the remaining routes. This increase in use on the remaining routes is thought to be fully offset by the elimination of use on the closed routes.

Cumulative Impacts

The reduction of available routes and the increase in BLM presence is likely to cause some vehicle recreationists to relocate their activities to other parts of the desert. As part of the public outreach program, BLM would encourage use of the El Mirage Recreation Area, Stoddard Valley OHV Area, and Johnson Valley OHV Area. However, since some of the recreationists that utilize the Edwards Bowl area have already responded that they do not want to use the El Mirage Recreation Area, it is safe to assume that they would relocate to some other area in the desert. It is impossible, however, to predict where this use will go or its impact. Johnson and Stoddard Valley Open Areas offer a less formal management approach which hopefully would satisfy this need.

In addition to closures of Edwards Bowl area, Fremont, Kramer, Red Mountain, Superior, and Newberry/Rodman areas (including Ord Mountain planning area) are all planning to consider interim closures that would be in place pending completion of the West Mojave planning process. These areas

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could cover large areas in the West Mojave planning area for two or more years into the future. The overall impacts of these closures can not be predicted as the proposals have not all been developed, but the cumulative effect on the route network would be substantial. However, the alternative of not developing these route networks would be even more substantial.

Formal route designation would be carried forward through the WMCMP planning effort and could lead to either an increase or decrease in the number of routes available for use. Additionally, the WMCMP process would likely address the possibility of accelerated revegetation through active revegetation and rehabilitation projects.

ENVIRONMENTAL CONSEQUENCES OF THE NO ACTION ALTERNATIVE

Air Quality

There are no new impacts to air quality identified based on the No Action alternative. Localized, heavy emissions of fugitive dust would continue, primarily on week-ends. During times of heavy OHV use, the 24 hour standard for PM-10 could be violated.

Cultural Resources

Vehicle use would continue on the extensive route network, providing a much higher opportunity for potential destruction of cultural resources than the proposed alternative.

General Vegetation

Vegetation and plant community dynamics would continue to suffer under the no action alternative. Vegetative mortality, injury, and non-native weed establishment, associated with soil loss and erosion, would continue unimpeded, in Edwards Bowl without an interim route closure and route implementation process.

General Wildlife

Wildlife mortality and habitat loss would continue unimpeded in Edwards Bowl under the no action alternative. Constituent elements comprising wildlife habitat including adequate forage, burrowing substrate, and vegetative cover/structure would continue to be negatively affected, therefore directly affecting wildlife establishment in Edwards Bowl with implementation of the no action alternative.

Invasive, Non-native Species

Because vehicle use would continue to be allowed on all existing routes, the possibility that invasive, non-native species would be spread through this activity is increased over that of the proposed action. Additionally, since soil disturbance and vegetative injury/mortality would occur over a greater area,

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more area would be susceptible to invasion by non-native invader species. The non-native species would most likely continue to spread and colonize in disturbed and undisturbed areas leading to a possible plant community type conversion, from a desirable plant community, to a less desirable, weedy plant community. An increase in the fire regime and a loss of forage plant species for sensitive species like the tortoise, within the Edwards Bowl area, is highly likely with the establishment of a weedy plant community.

Recreation

There would be no impact to vehicle based recreation from the No Action alternative as vehicle use would continue as in the past. Opportunities for those forms of recreation that rely on quite solitude and an unaffected natural environment would continue to be degraded.

Scenic Resources

There are no new impacts identified based on the No Action alternative. However, the opportunity to improve scenic resources will be put off until completion of the WMCMP plan.

Sensitive Vegetation

Presently there are no known sensitive plant species within Edwards Bowl, but with interim route closure and identification, vegetation and plant community health would most likely return. However, under the no action alternative, negative impacts to vegetation and plant community dynamics would continue.

Sensitive Wildlife (T&E and Sensitive)

Possible mortality of, and habitat loss for, sensitive wildlife species such as the tortoise, Mojave ground squirrel, and the burrowing owl, would continue unimpeded in Edwards Bowl under the no action alternative. Constituent elements comprising the affected species habitat including adequate forage, burrowing substrate, and vegetative cover/structure would continue to be negatively affected, therefore directly affecting wildlife establishment in Edwards Bowl with implementation of the no action alternative.

Soils/Erosion

There are no new impacts identified based on the No Action alternative. However, the opportunity to improve soil and erosional conditions will be put off until completion of the WMCMP plan.

Cumulative Impacts

There are no new impacts identified based on the No Action alternative.

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IMPLEMENTATION STRATEGY:

Patrolling

Patrolling by law enforcement, recreation, and visitor services personnel is a high priority task because such patrols help minimize damage to cultural and recreational resources, as well as sensitive plant and wildlife species. Patrols are critical to obtaining compliance with the vehicle access route network.

Visitor Service and Recreation staff would patrol open routes to make outreach contacts with visitors, to install and repair signs, and to remedy any non-compliance with the route network (e.g., rake out or disguise OHV tracks on closed routes). They would also identify where maintenance is needed, where violations are occurring, and collect other information on specific routes.

Sign Implementation

The following suggestions have been formulated to assist on-the-ground signing within the Planning Unit:

- C All routes available for use would be signed as open.
- C Signs stating “Motorized Vehicle Travel Limited to Routes Signed Open” will be installed at all major entrances and at congregation areas.
- C A kiosk will be constructed to display important information including a map of open routes, information regarding the Desert Tortoise, “Pack It In Pack It Out”, rules for shooting, Tread Lightly/Leave No Trace land use ethic, and information regarding other appropriate places for OHV recreation.
- C Junctions of closed routes would not need signs, except in unusual circumstances.

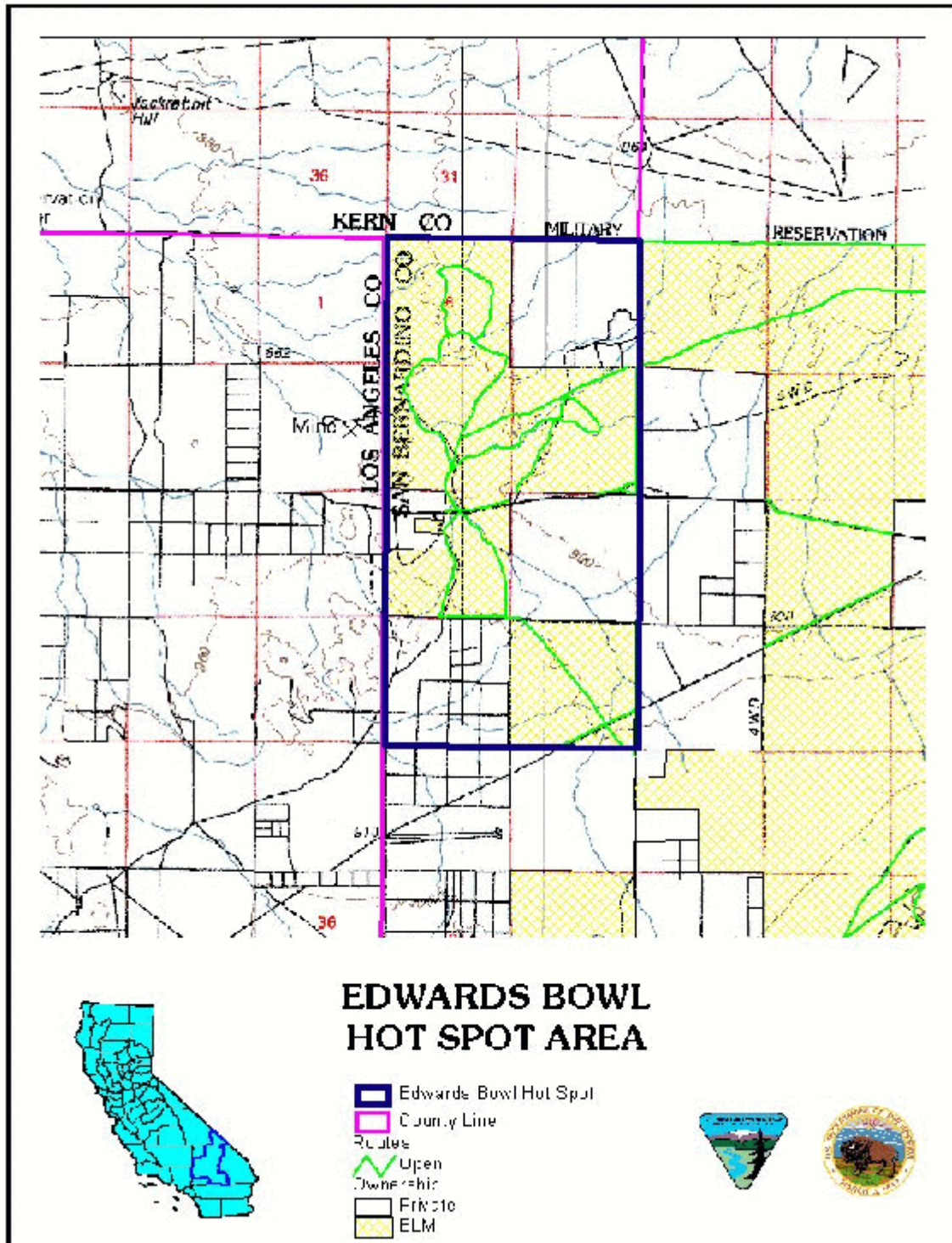
PREPARED BY: Mike Ahrens Title: Outdoor Recreation Planner DATE: May 24, 2001

Reviewed by: _____
Environmental Coordinator

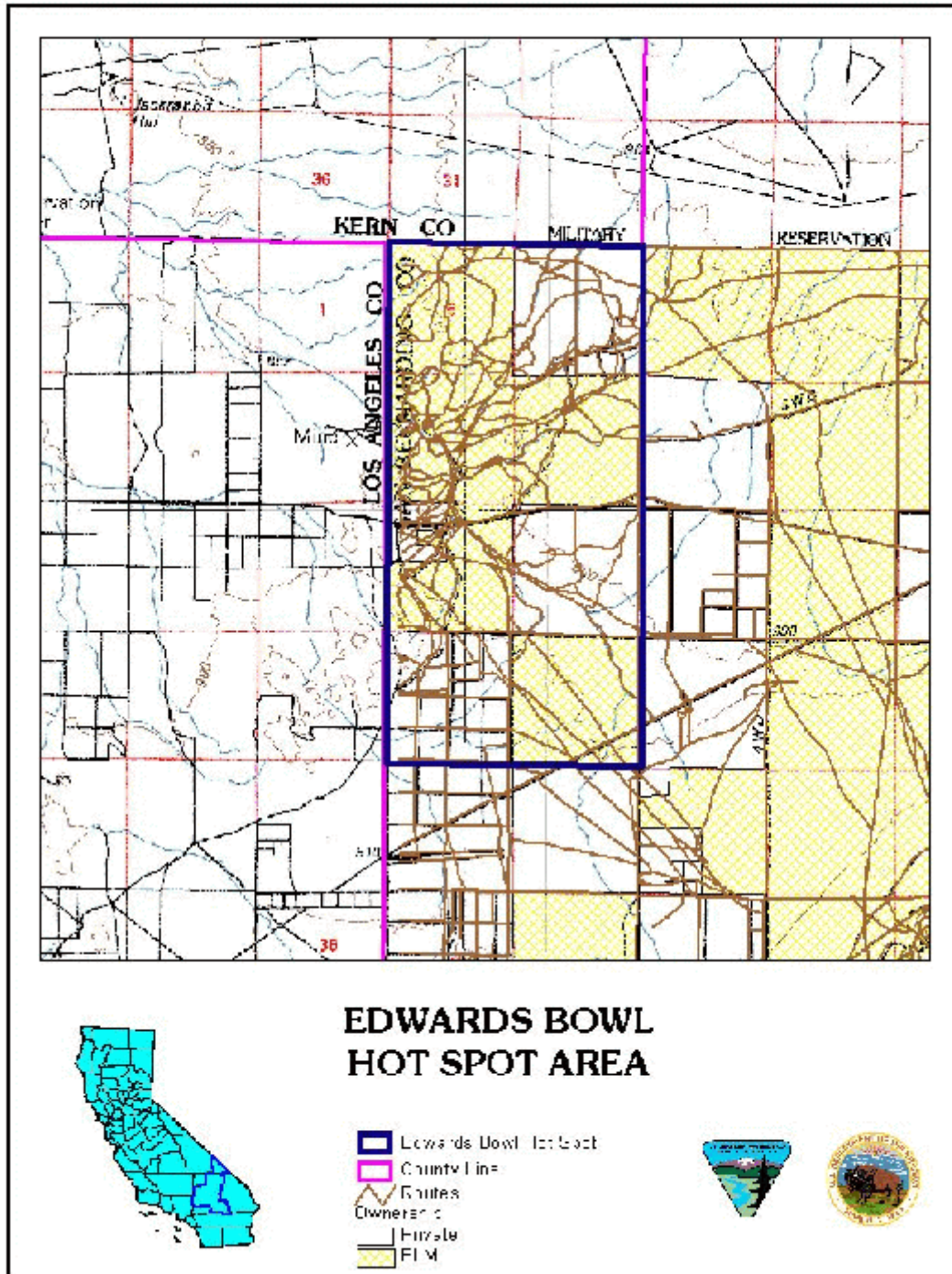
Date: June 11, 2001

Field Manager

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LITERATURE CITED

- Bureau of Land Management (BLM). 1980a. *The California Desert Conservation Area Plan*.
USDI Bureau of Land Management, California Desert District. Riverside, California. 173
pages plus appendices.
- Bureau of Land Management (BLM). 2000. *Ord Mountain Route Designation*. USDI Bureau of
Land Management, California Desert District. Barstow, California. 280 pages plus
appendices.
- Desert Tortoise Council. 1997. *Ord Mountain Pilot Study: Data Summary for Route
Designation*. Desert Tortoise Council. Wrightwood, California. 18 pages.
- Office of the Federal Register. 1998. 43 Code of Federal Regulations (CFR). Part 1000 to end.
U.S. Government Printing Office. Washington, D.C. 1059 pages.